

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
LARRY E. HENNEMAN, JR.
HENNEMAN & ASSOCIATES, PLC
714 W. MICHIGAN AVE.
THREE RIVERS, MI 49093

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing
(day/month/year)

25 AUG 2008

Applicant's or agent's file reference
0057-014P2PCT

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US07/04029

International filing date
(day/month/year) 16 February 2007 (16.02.2007)

Applicant
TECHNOLOGY PROPERTIES LIMITED

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 338.82.70.

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90*bis*.1 and 90*bis*.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (571) 273-3201

Authorized officer

TERI LUU

Telephone No. 571-272-3600

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 0057-014P2PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US07/04029	International filing date (<i>day/month/year</i>) 16 February 2007 (16.02.2007)	(Earliest) Priority Date (<i>day/month/year</i>) 16 February 2006 (16.02.2006)
Applicant TECHNOLOGY PROPERTIES LIMITED		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the **language**, the international search was carried out on the basis of:

☒

the international application in the language in which it was filed.

☐

a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 Rule 43.6 *bis(a)*

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒

the text is approved as submitted by the applicant.

☐

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒

the text is approved as submitted by the applicant.

☐

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 6

☒

as suggested by the applicant.

☐

as selected by this Authority, because the applicant failed to suggest a figure.

☐

as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/04029

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G06F 7/38**(2006.01)

USPC: 712/241

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 712/241

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
US-PGPUB, USPAT, USOCR,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,752,259 A (TRAN) 12 May 1998 (12.05.1998)	1-24
Y	US 2004/0003219 A1 (UEHARA) 01 January 2004 (01.01.2004)	1-24
Y	W3Schools, "VBScript Looping Statements", July 2000 http://www.w3schools.com/vbscript/vbscript_looping.asp	3-24
Y	Official Notice (NO-OP instruction)	12



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

22 August 2008 (22.08.2008)

Date of mailing of the international search report

25 AUG 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

TERI LUU

Telephone No. 571-272-3600

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
LARRY E. HENNEMAN, JR.
HENNEMAN & ASSOCIATES, PLC
714 W. MICHIGAN AVE.
THREE RIVERS, MI 49093

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 0057-014P2PCT		Date of mailing (day/month/year) 25 AUG 2008 FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/US07/04029	International filing date (day/month/year) 16 February 2007 (16.02.2007)	Priority date (day/month/year) 16 February 2006 (16.02.2006)
International Patent Classification (IPC) or both national classification and IPC IPC: G06F 7/38 (2006.01) USPC: 712/241		
Applicant TECHNOLOGY PROPERTIES LIMITED		

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 22 August 2008 (22.08.2008)	Authorized officer TERI LUU Telephone No. 571-272-3600
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US07/04029

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US07/04029

Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-24</u>	YES
	Claims <u>NONE</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-24</u>	NO
Industrial applicability (IA)	Claims <u>1-24</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US07/04029

Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-2 lack an inventive step under PCT Article 33(3) as being obvious over Tran (US Patent No. 5,752,259, herein Tran) in view of Uehara (US 2004/0003219, herein Uehara).

Regarding claim 1, Tran teaches: 1. In a computer (FIG. 1), an improvement comprising: a plurality of instructions that are read generally simultaneously (C. 3, L. 22-51); Tran does not specifically teach: wherein said plurality of instructions is repeated a quantity of iterations as indicated by a number on a stack. However, Uehara, in an analogous art, does (FIG. 1, FIG. 9) in order to allow multiple loop counters to be stored in the event of nested loops (FIG. 6). All of the component parts are known in Tran and Uehara. The only difference is the combination of the old elements into a single device by using a stack the store the loop count. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Uehara into the teaching of Tran to achieve a predictable result.

Regarding claim 2, the rejection of claim 1 is incorporated and further Tran/Uehara teaches: the number on the stack is decremented after each iteration (Uehara, FIG. 9, S4).

Claims 3-11 and 13-24 lack an inventive step under PCT Article 33(3) as being obvious over Tran et al. (US 2007/0113058, herein Tran) in view of Uehara (US 2004/0003219, herein Uehara) as applied to claims 1-2 above, and further in view of VBScript Looping Statements (VBScript School on 7/11/2000, herein VBScript).

Regarding claim 3, the rejection of claim 1 is incorporated but Tran/Uehara does not specifically teach: a last instruction in said plurality of instructions is a NEXT instruction. However, VBScript, in an analogous art, does (pp 2, "For... Next" Note: The/last instruction of the/loop is a Next instruction) for the purpose of changing the count value (pp 2-3 Note: The change of the Next instruction, can be specified by the scale value. In order to decrement the stack in conjunction with the teachings of Uehara the scale would be set to -1).

All of the component parts are known in Tran/Uehara and VBScript. The only difference is the combination of the old elements into a single device by using a Next instruction to denote the end of the loop. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of VBScript into the teaching of Tran/Uehara to achieve a predictable result.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US07/04029

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 4, the rejection of claim 3 is incorporated and further Tran/Uehara NBScript teaches: the NEXT instruction causes the number on the stack to change and further causes operation of the computer to continue at a first instruction in said plurality of instructions until the number on the stack reaches a predetermined value (VBScript, pp 2-3).

Regarding claim 5, the rejection of claim 1 is incorporated and further Tran/Uehara NBScript teaches: when a NEXT instruction is the last instruction in said plurality of instructions then the computer will continue operation at the first instruction in said plurality of instructions until the number on the stack reaches a predetermined value (VBScript, pp 2-3; Uehara, FIG. 9).

Regarding claim 6, the rejection of claim 5 is incorporated and further Tran/Uehara NBScript teaches: the predetermined value is zero (Uehara, FIG. 9).

Regarding claim 7, the rejection of claim 1 is incorporated and further Tran/Uehara NBScript teaches: a FOR instruction preceding said plurality of instructions (VBScript, pp 2-3; Tran, C. 3, L. 22-51).

Regarding claim 8, the rejection of claim 7 is incorporated and further Tran/Uehara NBScript teaches: said FOR instruction causes the number to be placed on the stack (VBScript, pp 2-3; Uehara, FIG. 9).

Regarding claim 9, the rejection of claim 7 is incorporated and further Tran/Uehara NBScript teaches: said FOR instruction is in a group of instructions immediately preceding said plurality of instructions (VBScript, pp 2-3).

Regarding claims 10 and 13-15, these claims contain the same limitations as claims 1, 3-4, and 7-8 and are rejected for the same reasons set forth in connection with the rejections of claims 1, 3-4, and 7-8.

Regarding claim 11, the rejection of claim 10 is incorporated and further Tran/Uehara NBScript teaches: said group of instructions includes four instructions (Tran, C. 3, L. 22-51, Note: While Tran does not specifically disclose 4 instructions, the system of Tran could execute a loop with 4 instructions. The amount of instructions that the system executes is not patentably distinct. See MPEP 2144.04 Section IV).

Regarding claim 16, the rejection of claim 10 is incorporated and further Tran/Uehara NBScript teaches: A computer readable medium having code embodied therein for causing an electronic device to perform the steps of Claim 10 (Uehara, FIG. 6, Abstract).

Regarding claims 17 and 20-24, these claims contain the same limitations as claims 1, 2, 4, 8, and 16 and are rejected for the same reasons set forth in connection with the rejections of claims 1, 2, 4, 8, and 16.

Regarding claim 18, the rejection of claim 17 is incorporated and further Tran/Uehara NBScript teaches: fetching another group of instructions; and continuing with the first instruction in said another group of instructions (Tran, C. 3, L. 22-51).

Regarding claim 19, the rejection of claim 17 is incorporated and further Tran/Uehara NBScript teaches: in step (b) the group of instructions is fetched into an instruction register; and in step (c) the instructions are executed from the instruction register (Tran, C. 3, L. 22-51, FIG. 1).

Claim 12 lacks an inventive step under PCT Article 33(3) as being obvious over Tran/Uehara NBScript as applied to claims 3-11 and 13-24 above, and further in view of Official Notice.

Regarding claim 12, the rejection of claim 10 is incorporated but Tran/Uehara NBScript does not specifically teach: at least one of the instructions in said group of instructions is a NO-OP instruction, wherein the NO-OP instruction is a place holder that the computer will skip over without executing. However, Examiner takes official notice that No-Op instructions are well known in the art. Several computer instruction sets include a specific instruction for a No-Op, such as the x86 line from Intel TM. The purpose of the No-Op instruction, also well known, is to do nothing at all besides wasting clock cycles in the CPU.

All of the component parts are known in Tran/Uehara NBScript and common knowledge in the art. The only difference is the combination of the old elements into a single device by using a stack the store the loop count. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a No-Op instruction into the teaching of Tran/Uehara NBScript to achieve a predictable result.

Claims 1-24 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the claimed invention.

Claims 1-24 meet the criteria set out in PCT Article 33(4), and thus has industrial applicability because the subject matter claimed can be made or used in industry.